Energy and Water

Proposed Recipient: Derry Township Municipal Authority
670 Clearwater Road
Hershey, PA 17033

Amount requested: $500,000

Project description: The proposed project includes installation of a gas conditioning system to clean and dry the biogas, and an internal combustion engine and generator system to generate electrical power and capture waste heat for beneficial use by the DTMA. In addition, the cleaned biogas will be compressed to allow more efficient use as a biofuel. The heat generated by the engine will be recovered and used to supplement the heat demand of existing oil fired boilers currently used for building heat. The system is projected to reduce the building heat fuel oil demand by approximately 70 to 80%. The utilization of the biogas, which is currently flared off as waste, will not only generate more than 1,500,000 kW annually, it will reduce fuel oil consumption by approximately 16,000 gallons annually as well as significantly reduce the current air emissions.

Proposed Recipient: Derry Township Municipal Authority
670 Clearwater Road
Hershey, PA 17033

Amount requested: $300,000

Project description: The proposed project involves the preparation of engineering design plans and specifications for the upgrade and expansion of the Derry Township Municipal Authority (DTMA) Southwest Wastewater Treatment Plant (WWTP). This WWTP is a 0.60 million gallons per day (MGD) wastewater plant and serves as a regional treatment plant for Derry, Londonderry and Lower Swatara Townships. The plant requires significant improvements to meet the Chesapeake Bay requirements imposed by the PA Department of Environmental Protection (DEP). In addition, the facility must be expanded to meet the needs of approximately 2,500 new connections in two districts located in the service area.

Proposed Recipient: East Penn Manufacturing
Deka Rd.
Lyon Station, PA 19536

Amount requested: $2,000,000

Project description: This project, conducted with Sandia National Laboratories, will lead to a new advanced battery system that will serve as

a longer lasting, cleaner, more affordable, American-made solution to the load-leveling challenge plaguing several current renewable energy systems. Currently, renewable energy systems, including most wind farm and solar energy applications, require the storage of energy in batteries to help balance the fluctuating generation of electricity (load leveling) with erratic peak demand periods. This battery technology, used in concert with the current generators, can improve grid stability by balancing the electricity load more efficiently than the generator-only grid. In addition, these batteries could eliminate the need for redundant generators on the grid thereby reducing greenhouse gas emissions. East Penn is one of the oldest, most diversified battery companies in the United States, employing nearly 5500 people, many in manufacturing jobs. This funding would help keep manufacturing jobs in the region and create new jobs rather than sending them elsewhere in the Unites States or overseas.

Proposed Recipient: Pittsburgh Iron Oxides, subsidiary of PMET
700 Fifth Ave
New Brighton, PA 15066

Amount requested: $1,000,000

Project description: Schuylkill County has a tremendous amount of industrial waste, and the area would be well served by its effective cleanup and reuse. Funding would support a demonstration program to test the feasibility of creating building bricks from industrial waste. The process by which these "green" bricks will be made utilizes 70% less energy than the current process by which concrete bricks are made. Moreover, by using industrial waste as the main ingredient of the bricks, the resulting product is virtually 100% green, while simultaneously erasing an enormous environmental problem; namely, the environmentally friendly disposal of fly ash.

Proposed Recipient: St. Luke's Miners Memorial Hospital
360 W. Ruddle Street
Coaldale, PA 18218

Amount requested: $2,000,000

Project description: Funding will be used to install energy efficient windows throughout the hospital and replace an aging roof with a thermal and moisture protected roof. The Energy Efficiency Improvement Project at St. Luke's Miners Memorial Hospital will replace windows that were installed over 40 years ago, with insulated glass units that are hermetically sealed and provide the highest level of insulation and

daylight to enter. Windows throughout the hospital are in poor condition and lack proper sealing which results in water leakage. Moreover, the windows are non-insulated and lose heat in the winter and experience heat gain in the summer. The project will also install a thermal and moisture resistant 15,000 sf roof. The current roof was installed in 1969 and is in a state of deterioration that is well beyond its service life. The current roof is poorly protected and lacks adequate insulation which results in heat escape in the winter and increased air conditioning needs in the summer. Thermal and moisture protected roofing systems ensure that all roof penetrations, field imperfections, low spots and ponded areas are watertight. Additionally, the roof will reflect 80-90% of the sun's energy resulting in less energy consumption, increased building comfort and a longer roof life.

Proposed Recipient: Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102-2319

Amount requested: $2,365,000

Project description: Funding would provide the Federal government's equitable funding share for annual expense budgets of the Mid-Atlantic River Basin Commissions, that is the Susquehanna River Basin Commission (SRBC), Delaware River Basin Commission (DRBC), and the Interstate Commission for the Potomac River Basin (ICPRB).

Proposed Recipient: Sweet Arrow Lake (U.S. Army Corps of Engineers)
31 Hopkins Plaza
Baltimore, MD 21201

Amount requested: $300,000

Project description: The purpose of this project is to restore and enhance fisheries habitat that has been lost to sedimentation and expand the total wetland area of the lake. Sediment removal will focus on restoring warm-water fisheries and increasing wetland habitat.